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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,151	12/09/2005	David F. Lawson	P02055US2A	9511

7590 04/05/2007
Bridgestone Americas Holding Inc
Chief Intellectual Property Counsel
1200 Firestone Parkway
Akron, OH 44317-0001

EXAMINER

RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1713

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/560,151

Applicant(s)

LAWSON ET AL.

Examiner

Roberto Rábago

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-14 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Inventor Lawson has not signed an oath or declaration in accordance with either 37 CFR 1.66 or 1.68.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 8, 10 and 12 rejected under 35 U.S.C. 102(b) as being anticipated by Tate et al. (US 4,927,887).

The reference discloses in Example 4 a living polymerization of polybutadiene functionalized in a first process with 2-vinylpyridine and second process with benzyl

chloride, followed by compounding with carbon black for the purpose of forming a vulcanizate, including all claimed limitations.

4. Claims 1, 3-5, 8, 10, and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ozawa et al (US 20050070672).

The reference discloses in Examples 8-13 living polymerization of polybutadiene functionalized in a first process with a first hydrocarbyloxysilane compound and second process with a second hydrocarbyloxysilane compound, followed by vulcanizing with carbon black or silica, including all claimed limitations.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 5, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tate et al. (US 4,927,887).

The reference discloses in Example 4 a living polymerization of polybutadiene functionalized in a first process with 2-vinylpyridine and second process with benzyl chloride, followed by compounding with carbon black for the purpose of forming a vulcanizate, including all claimed limitations except for use of styrene-butadiene

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copolymer and the claimed reactant Y'. However, the reference clearly suggests styrene-butadiene copolymer in the sentence bridging col. 3-4, and suggests use of species within the scope of Y' at col. 7, lines 6-12, providing motivation for those of ordinary skill in the art to use such embodiments.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tate et al. (US 4,927,887), optionally in view of Grun et al. (US 6,841,648).

The reference discloses in Example 4 a living polymerization of polybutadiene functionalized in a first process with 2-vinylpyridine and second process with benzyl chloride, followed by compounding with carbon black for the purpose of forming a vulcanizate, including all claimed limitations except for inclusion of an additional rubber in the final vulcanizate for a tire composition. However, the blending of polymers for vulcanized tire compositions is entirely conventional, and therefore one of ordinary skill in the art would be motivated to do so for improved tire performance. Optionally, further motivation can be found in Grun, which recommends combining an end functionalized polymer with another BR or SBR polymer for optimizing a vulcanizate for a tire composition (col. 7, lines 45-51).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al (US 20050070672).

The reference discloses in Examples 8-13 living polymerization of polybutadiene functionalized in a first process with a first hydrocarbyloxysilane compound and second

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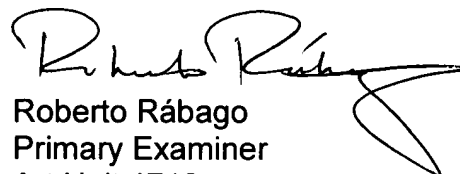
process with a second hydrocarbyloxysilane compound, followed by vulcanizing with carbon black or silica, including all claimed limitations except for the use of a second rubber. However, one of ordinary skill in the art would be motivated to use this embodiment because it has been recommended at [0115].

9. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Rábago
Primary Examiner
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RR
April 1, 2007